IN THE UNITED STATES PATENT AND TRADEMARK OFFICE REFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of: Corleto \$ Atty, Dkt. No.: COS-928
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Serial No.: 10/703.977 \$ Group Art Unit: 3726

For: Heat Treated Devolatilizer Nozzle \$
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Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Honorable Commissioner:

CERTIFICATE OF EFS-WEB TRANSMISSION 37 CFR 1.10

I hereby certify that this correspondence is being deposited on the date below with the United States Patent Office via the EFS-Wetsservice. A 4

Ayaolos MilliM

REPLY BRIEF

Appellants submit this Reply Brief to the Board of Patent Appeals and Interferences in response to the Examiner's Answer dated December 20, 2007.

Response to Examiner's Arguments

L THE EXAMINER ERRED IN REJECTING CLAIMS 1-3, 26-28 AND 50-51 UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY JAPANESE PATENT NO. 64-47878 (1978).

The Examiner maintains that the '878 patent teaches a method of forming a devolatilizer nozzle from a steel plate by perforating the steel plate and forming a nozzle from the plate. See, Examiner's Answer at page 9, lines 1-3. Appellants respectfully submit that simply perforating a steel plate is not "forming a devolatilizer nozzle from a perforated steel plate", as recited in pending claim 1, for example. In particular, the

teachings of '878 do not extend from the teaching of perforating a plate to a teaching or suggestion of forming a devolatilizer nozzle from the perforated plate.

The Examiner further contends that '878 discloses that the material surface retained sufficient surface hardness after heat treatment and referred to paragraph 15 for support. See, Examiner's Answer at page 9, second paragraph. Appellants would like to point out that paragraph 15 recites that "there were concerns that the heat treatment for TiC surface precipitation, which improves the adhesion between the stainless steel and the coating film, would cause a softening of the work-hardened layer in the nozzle for synthetic fiber spinning obtained in this manner. However, it is clear from test results that the surface retained sufficient surface hardness (e.g., TiC) and that the nozzle was very strong." The Examiner correctly points out that the material surface retained sufficient hardness. However, Appellants respectfully clarify that the surface material retaining sufficient hardness (in the '878 patent) is the coating material and not the actual stainless steel. In contrast, the pending claims are directed to heat treatment of the devolatilizer nozzle (i.e., the stainless steel) to improve the tensile strength and or yield strength of the devolatizer nozzle.

Accordingly, reversal of the rejection is respectfully requested.

II. THE EXAMINER ERRED IN REJECTING CLAIM 22 UNDER 35 U.S.C. \$103(a) AS BEING UNPATENTABLE OVER '878 IN VIEW OF NAKAGAWA.

The Examiner states that "878 teaches the invention cited above with the exception of annealing the steal plate." See, Final Office Action at page 5, lines 5-6. The Examiner further states that "[i]t would have been obvious to one of ordinary skill in the art, at the time of the invention...in light of the teachings of Nakagawa et al., in order to strengthen the steel material prior to further processing operations." See, Final Office Action at page 5, lines 7-10. Appellants disagree that it would have been obvious to strengthen the steel material prior to further processing operations based on the teachings of Nakagawa. Nakagawa teaches a continuous heat treating furnace in which heat is efficiently recovered from the combustion exhaust gas from the heating section of a continuous annealing furnace. See, at least Abstract. However, even if Nakagawa was combined with '878, Nakagawa does not teach the features missing in '878. In

particular, Nakagawa does not teach, show or suggest forming a devolatilizer nozzle, as recited in the pending claims and missing from the teachings of '878. Accordingly, Appellants respectfully request reversal of the rejection.

III. THE EXAMINER ERRED IN REJECTING CLAIMS 1-51 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER ADMITTED PRIOR ART (APA) IN VIEW OF *878 AND/OR NAGAGIA.

The Examiner disagrees that Appellants have traversed the Examiner's assertion of the Admitted Prior Art. Appellants again submit that the Admitted Prior Art was timely traversed (e.g., see capacity discussion on page 8 of the Response to the First Office Action and page 8 of the Response submitted with the Request for Continued Examination, which rebuts all of the APA rejections). Accordingly, Appellants respectfully request reversal of the rejections.

Conclusion

In conclusion, the references of record, alone nor in combination, teach, show or suggest forming a devolatilizer nozzle, as recited in the pending claims. Thus, Appellants respectfully request reversal of the rejections of claims 1-51.

Respectfully submitted,

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